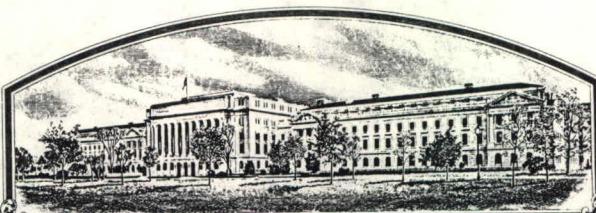


No.



8100051

# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

## Ferry-Morse Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXPOSE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (U.S.C. 542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

LETTUCE

'FM 8248'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 26th day of May in the year of our Lord one thousand nine hundred and eighty-three.

Attest:

*Kenneth H. Evans*  
Acting  
Commissioner  
Plant Variety Protection Office  
Grain Division  
Agricultural Marketing Service

*John R. Block*

Secretary of Agriculture





8100051  
'FM 8298'





# APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1a. TEMPORARY DESIGNATION OF VARIETY  E8248		1b. VARIETY NAME  <u>SALMAR Fm8248</u> <i>CRB 4/22/83 per letter</i>		FOR OFFICIAL USE ONLY PV NUMBER  8100051	
2. KIND NAME  HEAD LETTUCE		3. GENUS AND SPECIES NAME  <u>Lactuca Sativa</u>		FILING DATE  2/9/81	TIME 12:30 <u>P.M.</u>
4. FAMILY NAME (BOTANICAL)  Compositae		5. DATE OF DETERMINATION  February 1978		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 2/9/81 4/22/83
6. NAME OF APPLICANT(S)  FERRY-MORSE SEED COMPANY Haruo Sakamoto, Breeder		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) 111 Ferry-Morse Way Drawer 7274 Mountain View, CA 94042		8. TELEPHONE AREA CODE AND NUMBER  (415)967-6973	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) CORPORATION		10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION CALIFORNIA		11. DATE OF INCORPORATION 7 April 1969	
12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS: <del>Donald V. Brondyke, Executive V.P., Ferry-Morse Seed Company</del> <del>111 Ferry-Morse Way</del> <del>Drawer 7274, Mountain View, CA 94042</del> <i>PER LETTER OF MAY 7, 1981</i> <u>DR. DAVID J. THOMPSON</u> <u>P.O. BOX 1010</u> <u>2191 SAN JUAN ROAD</u> <u>SAN JUAN BAUTISTA, CA 95045</u>					
13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:					
<input checked="" type="checkbox"/> 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)					
<input checked="" type="checkbox"/> 13B. Exhibit B, Novelty Statement.					
<input checked="" type="checkbox"/> 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)					
<input checked="" type="checkbox"/> 13D. Exhibit D, Additional Description of the Variety.					
14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO					
14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input type="checkbox"/> YES <input type="checkbox"/> NO			14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input type="checkbox"/> CERTIFIED		
15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "Yes," give name of countries and dates.)					
15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO (If "Yes," give name of countries and dates.)					

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

1/28/81  
(DATE)

(DATE)

FORM GR-470 (1-78)

D. V. Brondyke  
(SIGNATURE OF APPLICANT)  
D. V. BRONDYKE, EXECUTIVE V.P.

(SIGNATURE OF APPLICANT)



'Fm8248' Cruz 4/25/83  
'SALMAR'

VARIETY: ~~E8248~~ (formerly 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3(C)Ms)

EXHIBIT A: Origin and Breeding History of the Variety

E8248 originated through the pedigree method of breeding as an F<sub>7</sub> mass from the cross of Vanguard as the seed parent and Montemar as the pollen parent. The cross was given the pedigree designation 3C-X177. The cross was made in the greenhouse at San Juan Bautista, California in the Spring of 1970.

The F<sub>1</sub> seed, 3C-X177, was planted in the greenhouse at San Juan Bautista, California in January, 1971. Seedlings were inoculated with spores of the Downy Mildew fungus, Bremia lactucae Regel, 1943, the strains for which the variety Montemar showed resistance. Seed was massed of 8 F<sub>1</sub> plants that showed resistance to Downy Mildew.

The F<sub>2</sub> generation, 3C-X177-(DM)Ms, was planted in the field at San Juan Bautista, California in late 1971 and evaluated in the Spring of 1972. 62 selections were made for desirable horticultural qualities and seed produced of the F<sub>3</sub> generation. Seed from 21 of the 62 selections (those that contained the gene for resistance to Downy Mildew) were massed.

The F<sub>3</sub> generation, 3C-X177-(DM)Ms(C)Ms#1, was planted in the field at San Juan Bautista, California in the fall of 1973 and evaluated in the Spring of 1974. 13 selections were made for smooth leaf texture and medium dark-green color. In late 1975, in the San Juan Bautista greenhouse, the progeny of the 10th selection in the F<sub>3</sub> generation, 3C-X177-(DM)Ms(C)Ms#1K, were demonstrated to be homozygous for resistance to the Downy Mildew strain(s) prevalent at the time in the Salinas Valley. Seed was harvested from one of the F<sub>4</sub> plants that showed Downy Mildew resistance.

F<sub>5</sub> seed from the Downy Mildew screening, 3C-X177-(DM)Ms(C)Ms#1K(DM)1, was planted in a field trial in Yuma, Arizona in the Fall of 1975. The plants were evaluated in March, 1976 and received a high field rating. 5 selections of the 'Vanguard' type were saved for seed.

F<sub>6</sub> progeny rows of the 1976 Yuma selections were planted in the Imperial and San Joaquin Valleys of California and in Yuma, Arizona in the Fall of 1976 for evaluation in early Spring of 1977. The 3rd progeny selection from the 1976 planting, 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3, consistently outperformed its sister progenies.

Remnant seed from the F<sub>6</sub> generation, 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3, was planted in April, 1977 on an isolation plot outside of Hollister, California to produce sufficient seed for wider sampling. The seed harvested, 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3(C)Ms, tested LMV-free (0/30,000). In February, 1978, this seed was given an advanced experimental designation, E8248, to establish the line for more wide-scale commercial evaluation.

In the Spring of 1979, seed of 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3(C)Ms with the new designation E8248, was planted in the Five Points area of California to increase seed for possible Stock Seed and/or sampling purposes.



RECEIVED

FEB 9 1983

U.S. DEPARTMENT OF AGRICULTURE

AMS, GRAIN DIV.  
PVPO



EXHIBIT A (con't)

8100051

'FM 8248' ~~SALTWATER~~ *enc 4/25/83*

Since February, 1978, when the decision was made to test E8248 for commercial status, E8248 has been grown in 8 trials for performance evaluation. No variant type plants were noted amongst a total of 581 plants. In addition, in 3 small block plantings which totalled over 1/10 acre in planting area and several hundred plants, no variant plants were ever recorded. Progeny selections of E8248 since the increase in 1977 have consistently produced plants similar to those of E8248; no variant types have been recorded. The variety is considered to be genetically stable for the significant characteristics of the variety.



A circular 'RECEIVED' stamp from the U.S. Department of Agriculture, AMS, Grain Division, PVPO. The stamp is dated FEB 9 1981 and features a clock face with a hand pointing to approximately 10:10. The text 'U. S. DEPARTMENT' is on the left, 'OF AGRICULTURE' is on the right, and 'AMS, GRAIN DIV. PVPO' is at the bottom.

FM 8248  
 'SALMAR' end  
 VARIETY: E8248 (formerly 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3(C)Ms)

EXHIBIT B: Data Indicative of Novelty

E8248 has shown commercial potential for early spring harvest in the Southwest desert and San Joaquin Valley areas of lettuce production and for spring harvest in the Central Coast area of California. E8248 most closely resembles the variety Vanguard in the desert, and Salinas in the Central Coast.

The following measurements were taken in 1980 under field conditions at Yuma, Arizona, San Joaquin Valley, California, and San Juan Bautista, California, and under greenhouse conditions at San Juan Bautista, California:

	VANGUARD	E8248	$\bar{d}$	$s^2$	t	P
1. Frame size at Yuma (10 paired comparisons)	49.3 cm Range(44.5-55.9)	45.0 cm (41.9-48.3)	4.1	13.18	3.61	<.01
2. Frame size at San Joaquin Valley (10 paired comparisons)	42.4 cm Range(40.6-44.5)	39.2 cm (36.8-43.2)	3.43	3.60	5.72	<.01
3. Frame size in San Juan Bautista greenhouse (12 paired comparisons)	31.7 cm Range(21.0-47.5)	26.3 cm (18.0-36.0)	8.63	56.10	3.99	<.01
4. Head shape Index (Length/width ratio) at Yuma(10 paired comparisons)	0.91 Range(0.81-0.98)	0.92 (0.87-0.96)	0.048	0.0007511	5.53	<.01
	SALINAS	E8248	$\bar{d}$	$s^2$	t	P
5. Frame size at San Juan Bautista (field) (10 paired comparisons)	44.9 cm Range(38.0-48.7)	44.0 cm (41.0-47.2)	2.39	1.93	5.44	<.01
6. Core length at San Juan Bautista (field) (10 paired comparisons)	38.2 mm Range(31.0-46.0)	29.1 mm (19.0-34.0)	8.9 9.1	26.21 5.12	5.21 1.738	<.01 .2 < P < .1
7. Head Shape Index (length/width ratio) at San Juan Bautista(field) (10 paired comparisons)	0.96 Range(0.84-1.05)	0.93 (0.76-1.10)	0.093	0.004423	4.42	<.01





VARIETY: <sup>FM 8248' ex</sup> ~~Salmar~~ (formerly E8248, 3C-X177-(DM) Ms(C) Ms#1K(DM) 1(A) 3(C) Ms)

ADDENDUM TO EXHIBIT <sup>B</sup> D: Data Indicative of Novelty

Salmar most closely resembles the variety Salinas in the Central Coast growing area of California.

The following measurements were taken in the Spring and Summer of 1981 at San Juan Bautista, CA. under field conditions.

Planting No. 1 (Planted 3/11/81)

	Salinas	Salmar	s <sup>2</sup>	t	P
Frame size (20 non-paired comparisons)	42.5 cm. (Range 38.5-47.0)	51.4 cm. (43.5-57.0)	11.56	8.29	<.01

No. days when 50% of plants had seedstalks greater than 30 cm. (10 non-paired samples)	120 days	102 days
---	----------	----------

No. days when 50% of plants had flowers in bloom. (10 non-paired samples)	138 days	120 days
---	----------	----------

Planting No. 2 (Planted 7/7/81)

	Salinas	Salmar	s <sup>2</sup>	t	P
Frame size (20 non-paired comparisons)	37.0 cm. (Range 29.5-45.5)	42.6 (32.0-49.2)	20.8	3.88	<.01

The following color comparisons were made in the summer of 1981 at San Juan Bautista, CA. under field conditions. Planting date was 6/24/81. The ISCC-NBS Centroid Color Chart was used.

VARIETY	READING	DESCRIPTION
Salmar	120	Medium Yellow green
Vanguard	125	Medium Olive green

25 September 1981





'FM8248'  
'SALINAS' CMS 4/25/83

VARIETY: ~~E8248~~ (formerly 3C-X177-(DM)Ms(C)Ms#1K(DM)1(A)3(C)Ms

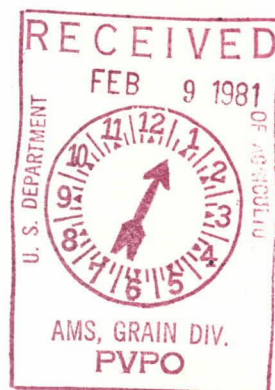
EXHIBIT B: Botanical Description of the Variety

E8248 is a black-seeded, crisphead lettuce that can best be described as a 'Vanguard' type in the Imperial Valley/Yuma areas of production and a 'Salinas'-type in the Salinas Valley area of California. E8248 has the ability to produce medium-large heads in the desert areas during the Winter and in Coastal Central California during early spring.

In comparison to 'Vanguard' in the desert, E8248 is less vigorous and is a shade paler dark gray-green. Leaves are much smoother textured than Vanguard. Leaf margins are shallowly dentate and moderately curled. Butts are flat and much less ribby than Vanguard. Color extends well to the cores. Heads are round to very slightly oblate, but are consistently very slightly more rounded than Vanguard. In addition to a more refined appearance of E8248 over Vanguard, the most novel characteristic is E8248's resistance to certain strains of Downy Mildew (*Bremia lactucae*, Regel, 1943) for which Vanguard shows no resistance.

In comparison to the variety 'Salinas' in the Central Coast area of California, E8248 produces heads with smoother, though slightly more rounded, butts on a frame that is slightly smaller. Head shape is very slightly more oblate than Salinas.





## ASSIGNMENT OF INTELLECTUAL PROPERTY

WHEREAS, HARRIS MORAN SEED COMPANY, a corporation duly organized and existing under the laws of the State of Maryland, having its principal place of business at 4511 Willow Road, Suite 3, Pleasanton, California 94588 ("Assignor"), has, pursuant to that certain Bill of Sale and Assignment dated as of June 30, 1997, transferred to FERRY-MORSE SEED COMPANY (CALIFORNIA), a corporation duly organized and existing under the laws of the State of California, having its principal place of business at 555 Codoni Avenue, P.O. Box 4938, Modesto, California 95352-4938 ("Assignee"), all of the intellectual property Assignor had adopted, used and was using as of the effective date of this Assignment, including without limitation, the intellectual property represented by the United States Plant Variety Protection Certificates of Assignor identified on Schedule A hereto (collectively, the "Property"); and

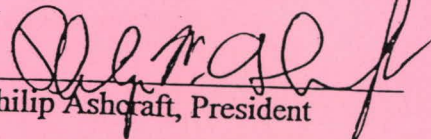
WHEREAS, on the date hereof, Assignee has changed its name to "Harris Moran Seed Company";

NOW, THEREFORE, effective by this instrument as of the close of business on June 30, 1997, and for good and valuable consideration, receipt of which is hereby acknowledged, Assignor hereby assigns to Assignee any and all right, title and interest worldwide in and to the Property and any and all recordations thereof, including, but not limited to, the use of the Property in any manner, all benefit of any and all prior use of the Property, and any and all rights to initiate claims or proceedings for past, present or future infringements of Assignor's rights, title and interest in and to the Property.

Dated: as of June 30, 1997

HARRIS MORAN SEED COMPANY

By:

  
Philip Ashcraft, President





CERTIFICATE OF AMENDMENT  
OF THE  
ARTICLES OF INCORPORATION  
OF

FERRY-MORSE SEED COMPANY (CALIFORNIA)  
(a California corporation)

14300010

ENDORSED  
FILED

In the office of the Secretary of State  
of the State of California

JUN 30 1997

*Bill Jones*  
BILL JONES, Secretary of State

To the Secretary of State  
State of California

Pursuant to the provisions of the General Corporation Law of the State of California, the undersigned officers of FERRY-MORSE SEED COMPANY (CALIFORNIA), a California corporation (the "Corporation"), do hereby certify as follows:

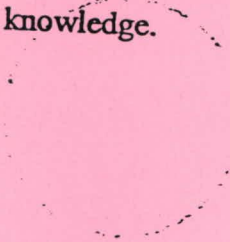
1. The name of the Corporation is Ferry-Morse Seed Company (California).
2. Article One of the Corporation's Articles of Incorporation, which relates to the name of the Corporation, is hereby amended in its entirety to read as follows:
  - One. The name of this Corporation is:  
HARRIS MORAN SEED COMPANY.
3. The amendment herein provided for has been approved by the Corporation's Board of Directors.
4. The amendment herein provided for was approved by the written consent of the Corporation's sole shareholder in accordance with the provisions of Section 902 of the California General Corporation Law. The total number of outstanding shares of the corporation is 5,000.

IN WITNESS WHEREOF, each of the undersigned does hereby declare under the penalty of perjury that he or she signed the foregoing Certificate of Amendment as of June 30,





1997, in the Town of Modesto, State of California, in the official capacity set forth beneath his or her signature and that the statements set forth in this certificate are true of his or her own knowledge.



Yves Queste

Yves Queste, President

Helen Andritsakis

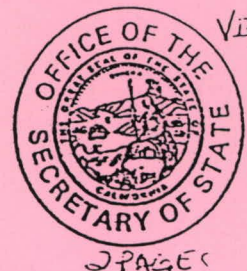
Helen Andritsakis, Secretary







SECRETARY OF STATE



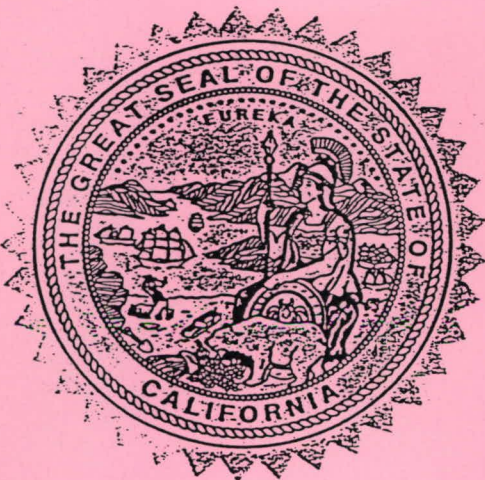
J PAGE

I, *BILL JONES*, Secretary of State of the State of California, hereby certify:

That the attached transcript has been compared with the record on file in this office, of which it purports to be a copy, and that it is full, true and correct.

IN WITNESS WHEREOF, I execute  
this certificate and affix the Great  
Seal of the State of California this

JUN 30 1997



Secretary of State





## 16. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER		NAME OF VARIETY				
Leaf color		Salinas, Vanguard				
Leaf pigmentation		Salinas, Vanguard				
Leaf shape		Salinas, Vanguard				
Plant size		Salinas				
Head size		Salinas				
VARIETY	NO. OF DAYS TO HEAD MATURITY UNDER WINTER CROPPING	LOCATION	NO. OF DAYS TO HEAD MATURITY UNDER SUMMER CROPPING	LOCATION	NO. OF DAYS TO SEED STALK EMERGENCE UNDER SUMMER CROPPING	LOCATION
Submitted	111	Yuma, Arizona	100	Salinas Valley California	142	San Juan Ghse California
Similar	112	Yuma, Arizona	100	Salinas Valley	163	(Planted 11/8/79)
Name of similar variety	VANGUARD		SALINAS		SALINAS	

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for completing this form:

1. C. M. Rodenburg, 1960, Varieties of Lettuce, An International Monograph, Institut Voor de Veredeling van Tuinbouwgewassen, Wageningen, Holland.
2. L. L. Morse, 1930, Field Notes on Lettuce, published by Ferry-Morse Seed Co.

LEAF COLOR: Nickerson's or any recognized color fan may be used to determine the leaf color of the described variety. The following lettuce varieties may be used as a guide to identify the eight colors listed on the form.

ColorVariety

Red	"Salad Trim"
Reddish-brown	"Ruby"
Yellow	"Salad Bowl"
Yellowish-green	"Oakleaf"
Greyish-green	"White Boston"
Bluish-green	"Bibb"
Dark-green	"Imperial" group
Very dark green	"Deer Tongue"

FEB 9 1981

PLANT SIZE: The following varieties may be used as a guide to identify the plant type size:

TYPE	COMPARABLE VARIETIES		
	SMALL	MEDIUM	LARGE
Cutting (leaf)	Boston-Curled	Prize Head	Grand Rapids
Stalk (stem)	Celtuce	--	--
Cos	Express	Parris Island	Giant White
Crisphead	Mignonette	Hanson (Merit)	Climax
Butterhead	Tom Thumb	Big Boston	Mammoth Butter
Latin	Sucrine	Creole	Deer Tongue



OBJECTIVE DESCRIPTION OF VARIETY  
(LETTUCE)

INSTRUCTIONS: See reverse.

NAME OF APPLICANT(S) <b>FERRY-MORSE SEED COMPANY, Haruo Sakamoto, Breeder</b>		FOR OFFICIAL USE ONLY	
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code) <b>111 Ferry-Morse Way Drawer 7274 Mountain View, CA 94042</b>		PVPO NUMBER <b>297 - 1 - 8100051</b>	
		VARIETY NAME OR TEMPORARY DESIGNATION <b>E8248 = SALMAR 'Fm 8248'</b>	<b>CKB 4/25/83</b>

Place the appropriate number that describes the varietal character of this variety in the boxes below.

1. PLANT TYPE: <div><input type="text" value="4"/><input type="text" value="3"/></div> 10 = CUTTING (Leaf)      20 = STALK 50 = BUTTERHEAD      60 = LATIN 70 = OTHER (Specify) _____		30 = COS 31 = SELF-CLOSING GROUP 32 = LOOSE-CLOSING GROUP	40 = CRISP HEAD 41 = IMPERIAL GROUP 42 = GREAT LAKES GROUP 43 = VANGUARD 44 = NEW YORK GROUP
2. SEED COLOR: <div><input type="text" value="2"/></div> 1 = WHITE    2 = BLACK    3 = YELLOW		3. ANTHOCYANIN: <div><input type="text" value="1"/></div> 1 = ABSENT    2 = PRESENT	
4. LEAF CONTAINING ANTHOCYANIN: <div><input type="text" value="4"/></div> 1 = COVERED    2 = SPOTTED    3 = ALONG MARGIN    4 = ABSENT    5 = OTHER (Specify) _____			
5. LEAF SURFACE TEXTURE: <div><input type="text" value="1"/></div> 1 = SMOOTH    2 = BLISTERED		6. LEAF SURFACE REFLECTANCE: <div><input type="text" value="1"/></div> 1 = DULL    2 = GLOSSY    3 = OTHER (Specify) _____	
7. LEAF MARGIN: <div><input type="text" value="2"/></div> 1 = STRAIGHT    2 = WAVY 3 = CURLED		<div><input type="text" value="2"/></div> 1 = ENTIRE    2 = DENTATE    3 = INCISED 4 = DEEPLY INCISED    5 = OTHER (Specify) _____	
8. LEAF SHAPE: <div><input type="text" value="1"/></div> 1 = ROUNDED    2 = POINTED		<div><input type="text" value="2"/></div> 1 = BROADER THAN LONG    2 = <i>slightly</i> LONGER THAN BROAD <i>1/18/83</i> 3 = OTHER (Specify) _____	
9. LEAF COLOR: (See reverse.) <div><input type="text" value="5-7"/></div> 1 = RED    2 = REDDISH-BROWN    3 = YELLOW    4 = YELLOWISH-GREEN    5 = GREYISH-GREEN 6 = BLUE-GREEN    7 = DARK-GREEN    8 = VERY DARK GREEN			
10. HEADS: <div><input type="text" value="1"/></div> 1 = SPHERICAL    2 = FLATTENED    3 = ELONGATE 4 = POINTED    5 = NON-HEADING		11. PLANT SIZE: (See reverse.) <div><input type="text" value="2-3"/></div> 1 = SMALL    2 = MEDIUM    3 = LARGE	
12. CULTURE: <div><input type="text" value="2-5"/></div> 1 = SUMMER CROP    2 = WINTER CROP    3 = NOT SPECIFIC    4 = UNDER GLASS    5 = OTHER (Specify) <u>Spring: Pacific Coast</u>			
13. SIZE OF 10-DAY OLD SEEDLING GROWN UNDER CONSTANT LIGHT (Growth Chamber) AT 25° C.: (Place a zero in first box (i.e. <input type="text" value="0"/> <input type="text" value="2"/> )) when size is 9 mm. or less.) <div><input type="text" value="6"/><input type="text" value="5"/></div> mm. LENGTH OF SEEDLING <div><input type="text" value="1"/><input type="text" value="0"/></div> mm. LENGTH OF COTYLEDON <div><input type="text" value="0"/><input type="text" value="3"/></div> mm. WIDTH OF COTYLEDON			
14. DISEASE RESISTANCE TO: (Enter zeroes in box(es) where there is no special disease resistance.) <div><input type="text" value="1"/></div> 1 = TIPBURN <div><input type="text" value="0"/></div> 2 = MOSAIC <div><input type="text" value="0"/></div> 3 = DAMPING OFF <div><input type="text" value="4"/></div> 4 = DOWNY MILDEW <div><input type="text" value="0"/></div> 5 = SCLEROTINIA ROT <div><input type="text" value="0"/></div> 6 = BROWN BLIGHT <div><input type="text" value="0"/></div> 7 = BIG VEIN <div><input type="text" value="0"/></div> 8 = OTHER (Specify) _____			
15. OUTLINE THE FOURTH LEAF: (For standardization purposes, the fourth leaf should be taken from a 20-day old plant grown under constant light.)			